FORT MONROE
Hampton
Hampton County
Virginia

HABS NO. VA-595

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

REDUCED COPIES OF DRAWINGS

Historic American Buildings Survey
National Park Service
Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

HISTORIC AMERICAN BUILDINGS SURVEY
FORT MONROE
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I. HISTORICAL DEVELOPMENT

A. Site History

Fort Monroe occupies a sandy projection of land in Hampton, Virginia, at the end of the peninsula between the York and James Rivers. Between this spit and the peninsula is a small inlet, Mill Creek. This site is connected to that peninsula by sand bars frequently flooded by the Chesapeake Bay which is to the east of fort Monroe. The large harbor of Hampton Roads is to the south. Although Fort Monroe was begun in 1818, the history of the site and earlier impermanent defensive works stretch back over 200 years. The history of this sandy site is at least as remarkable and complex as any region of the United States. It has played a significant part in the cultural and military history of not only Virginia and the Thirteen Colonies, but also the United States.

On April 28, 1607, after two days of searching for a channel deep enough to accommodate their ships, members of the London company found a spit of land with six-to-twelve fathom-deep waters nearby. Relieved by their discovery, these earliest settlers named the site Cape Comfort land , later, Point Comfort in appreciation of the fact that their journey had ended safely. Point comfort provided a base from which further exploration of the area could commence. A similar strip of land farther west at the mouth of Mobjack Bay was explored and named New Point Comfort. Consequently the Point Comfort upon which Fort Monroe now stands was renamed Old Point Comfort.

Recognition of the military value of Old Point Comfort dates to its earliest settlement. Soon after the 1607 arrival of the colonists, defensive works were constructed on the Point at the mouth of the James River to protect their communities. From Old Point Comfort the colonists explored and settled what would become Jamestown and erected additional fortifications at Old Point Comfort where the width of the channel of the James River was its most narrow. Defensive works have occupied the site almost continuously for the ensuing 375 years.

The British decided in 1608 that a substantial fort at Old Point Comfort would protect the colonists, who were moving farther up the James River, from the hostile ships of competitive foreign colonizers. On October 3, 1609, a group or sixteen men under the command of Captain James Davis arrived form Great Britain and, with detachment form Jamestown under the direction of Captain Ratcliffe, went to Old Point Comfort to build a new and substantial fort. George Percy, resident of the Colonial Council, named the defensive work "Algernourne Fort" in honor of William de Percy, a distant ancestor and the first Lord Alernon,

who had come to England with William the Conqueror.

Initially Fort Algernon was merely earthwork; however, "by early 1611 it was well stockaded and contained seven heavy guns and number of smaller weapons. Its garrison was a company of 40 men commanded by Captain Davis."[1] The British undertook other forts (Forts Henry and Charles) nearby; however, their role was subsidiary to Fort Algernon. On May 22, 1611, Captain Davis was appointed by Sir Thomas Dale as "taskmaster" for the three forts which would form the first harbor defense command on the continent.

A physical description of these defensive forts was provided by Spaniard Diego di Molina who was imprisoned there.

> At the entrance (into the James River) is a fort (fuerte) or, to speak more exactly, a weak structure of boards ten hands high with twenty-five soldiers and four iron pieces. Half a league off is another (Fort Charles) smaller with fifteen soldiers, without artillery. There is another (Fort Henry) smaller than either, half a league inland from here for a defense against the Indians. This has fifteen more soldiers.[2]

Unfortunately, an accidental fire destroyed Fort Algernon in February/March of 1612. By that time the fort boasted a stockaded earthwork with storehouse, magazine and garrison quarters. Captain Davis and his men immediately began the fort's reconstruction; however, it was never again called Fort Algernon but simply "the fort at Old Point Comfort."

The fort's reconstruction was poorly executed. Upon Governor Argall's arrival at the fort in May 1617, he decided to instigate repairs and improvements to the ailing defensive work. This undertaking was likewise insubstantial, for when Governor Yeardly arrived in the colony in 1619, he found not one fortification capable of defending the settlements from hostile naval approach.

> The climate of Virginia was conducive to rapid decay, and this, combined with the lack of engineering skill among the men of the colony, prevented the erection of enduring works. As a result, from this time to the end of the colonial period the forts quickly fell into dilapidation and ruins.[3]

The climate was not the only deterrent to the erection of permanent fortifications at Old Point Comfort. The maintenance of the forts was financed by the taxation of the colonists, who did not share the British desire to protect the coastline which the settlers felt was sufficiently secure. Despite orders Monroe

England to repair or erect new fortifications, the colonists refused. Commissioners returning to England in 1625 reported that there were not public works, guest house, church, or fort.

Not until 1630, when the resources of the colony had improved, did the General Assembly draft a resolution to construct a substantial fortification. This new fort was completed under the direction of Captain Sam Matthews by 1632. The upkeep of this fort was to be financed not only by taxation but also by tariffs levied on incoming ships; however, these funds were poorly managed. By 1640 a new fort was necessary and the General Assembly levied a taw on the colonists for the reconstruction. It was apparent that a fort built of stone would preclude the constant need for repairs and reconstruction and in 1650 Governor Berkeley received the authority from England to build one. However, Berkeley wanted a fort at Jamestown so that he could collect the tariffs; consequently, he never availed himself of the authority. The fort at Old Pint Comfort fell into disrepair and by 1664 was again useless.

On July 8, 1666, the General Assembly bowed to Governor Berkeley's wishes and ordered the construction of a large fort at Jamestown. Old Point Comfort was discounted as a fort site because: the discovery that the channel of the James River was wider than previously thought; prohibitive cost of construction; sparse local population; no local fresh water; infertile soil. During the construction of the Jamestown fort the Dutch approached the unprotected harbor and burned numerous ships and Hampton. The General Assembly immediately vote to erect a fort at Old Point Comfort (and three other sites) for strategic reasons alone. by June 1667, eight guns were positioned at the Point; however, on August 27, 1667, a "dreadful Hurry Cane. . .carryed all the foundations of the fort at Point Comfort into the River and most of our Timber which was very chargeably brought thither to perfect it."[4] Fortunately, no one was injured. Nothing was done to replace the lost defensive works and three years from the date of construction they were in ruins.

During the remainder of the century there were no more signs of interest in fortification. By 1681 the forts were reported to by indefensible; by 1690 Governor Nicholson declared all fortifications to be in ruins. In 1695 the Jamestown fort was demolished and in 1699 the Governor and the General Assembly agreed to recommend that all forts be allowed to sink into ruin. Even with Europe at war, the colonists did not feel a threat serious enough to warrant the expense of erection coastal defenses.

In 1711, however, upon receiving news of the approach of the French Fleet, Governor Spottswood, acting without the approval of

the General Assembly, resurrected four forts with a total of 70 cannons. One fort was at Old Point Comfort. As had been the case, again the forts were allowed to rot when the colony later felt secure. Consequently in 1728, the General Assembly was again considering the cost of revitalizing the fort.

By March 1728, the General Assembly had appropriated enough funds to undertake the most substantial and elaborate fortification ever undertaken by the colony.

> The new fort was built of brick and shell lime in two lines of walls about sixteen feet apart. . . The bricks, homemade, were 9"x4"x3". the exterior wall was 27" thick, while the interior was but 16" thick. The two walls were connected by a series of counterparts 10 or 12 feet apart, forming a system of cribs, which were filled with sand. With this wall of brick and sand sixteen feet in thickness, the fort had a substantiality that was more apparent than real, for in the outer wall would endanger the whole structure.[5]

In honor of the reigning British monarch, the defensive work was named fort George. Even this substantial fort fell into disrepair. It had been constructed in preparation for war; however, with Britain still fighting Spain in 1742, Fort George had seen no military action and consequently had received no upkeep. The already weakened fort experienced a hurricane in 1749 and although no one was injured, the fort was completely destroyed. With the loss of Fort George, colonial coastline fort defenses came to an end. In 1756 and 1757 Governor Dinwiddie reported to the Lord's Commissioners for Trade and Plantation that "we have no forts in y's Dom'n. There was one erected at the mouth of Jas. River, but as it was built on a Sandy Foundation, the Sea and Weather destroyed it (so) y't the Guns lie dismounted, and (are) of no use."[6] By 1774 the garrison was reduced to one man, John Dames, to oversee the ruins. The began to display a light at night for the benefit of passing ships.

The Revolutionary War refocused the attention of the colonies on coastal defense. No fortifications existed which could effectively keep the British from invading at will. Even by 1781, there were only six men at Old Point Comfort. Lord Cornwallis chose to occupy fortifications at Yorktown and Gloucester instead of Old Point Comfort because: no drinking water was available; material for repairs would be brought from a distance; the existing structure was too seriously decrepit. these disadvantages were not at Yorktown; however, Yorktown was vulnerable from land attack. This weakness allowed the defeat of Cornwallis and the ultimate victory over the British. With the end of the war, Old Point Comfort was once again abandoned and

allowed to fall into disrepair.

George Washington immediately urged Congress to develop a network of coastal defenses. Congress felt this to be less important than other issues facing the country in 1791 and, consequently, failed to devise a national defense policy, thus thwarting any federally-sponsored fort construction. Individual states began taking the initiative. Virginia's Governor Henry Lee recommended the erection of defensive works at Old point Comfort "where the old fort stood."[7] The federal government then stepped in to make recommendations on fort specifications but it was not until April 9, 1798, that Secretary of War James McHenry petitioned for $30,000 in federal funds. The government appropriated $250,000 for the entire United States coastal defense project; however, without specific allocations Old Point Comfort received no funding.

Although the military importance of Old Point Comfort had been recognized by the earliest settlers in Virginia, the actual maintenance of defensive works at the site was inconsistent. "Lack of interest on the part of the colonists and the failure to develop and promote a defensive policy on the part of both British and Colonial governments prevented permanent fortification erection at Old Point Comfort."[8] With the conclusion of the Revolutionary War, the United States would be faced with the reality of developing its coastal defense. Old Point Comfort would again play a considerable role in the defense. Old Point Comfort would again play a considerable role in the defense of not only Hampton Roads and the Chesapeake bay but also the United States. As numerous impermanent defensive works had been constructed at Old Point Comfort without success, any future fortifications would have to be permanent and thoroughly engineered to anticipate new defensive developments and weaponry innovation. The nineteenth century fort at Old Point Comfort would be the state-of-the-art defensive work not only in the United States but also the world.

Fort Monroe was the synthesis of contemporary European fortification theory in the early nineteenth century. Fortification construction had developed into a serious science from humble beginnings in classical times. Historically, fortifications have been constructed for a few simple reasons. The most basic function is to retain a secured position and deny enemy access. In the event of an invasion, a will-placed fort would also act to force the aggressors into a vulnerable position, leaving them open to counterattack. Furthermore, the mere presence of a strong fortification would prove to be a deterrent.

The tradition of building fortifications reaches back to the

ancient world. The greeks had walled cities on hilltops. Later improvements in military apparatus necessitated more substantial defense constructions. Roman fortifications were built using a double set of walls with earth infill.

Further changes in fortification architecture occurred during the Middle Ages. Battlemented walls, towers, moats, and overhanging galleries (hoardings) appeared at this time. During the Renaissance, gunpowder and cannons were developed which had the capability of destroying stone walls. Masonry fortifications became obsolete against land attack, but continued to be used for coastal defense. Immediately, fortification designs changed. Walls became lower and thicker; towers were replaced by salient, projecting bastions (bulwarks), which eliminated indefensible ground and increased the defender's field of fire. In addition, forts were built with more sides in order to increase the amount of usable interior space. Another important change was the implementation of ditches (wet or dry), to force attackers into exposed and vulnerable positions.

By the late seventeenth century, European fortifications had become stronger and more effective, due largely to the efforts of Sebastien Le Prestre Vauban. Vauban, a Frenchman, not only designed and constructed fortifications but also directed sieges. Vauban's genius was in using a scientific approach to design forts adapted to specific site conditions. He developed a set of principles that were soon considered universal:

1. All parts of the fortification must be visible from other parts.
2. Wide flanks are best (flanks protect the walls between the bastions).
3. Each flank should be within musket range.
4. All parts of the fortification must flank, face, or curtain.
5. The fortification must be sturdy.

Vauban's principles influenced the French Corps of Engineers (this influence would later aid in American fortification construction) and were adopted by the Ecole Polutechnique. the United States Military Academy at West Point (established 1802) had a curriculum similar to that of the Ecole Polytechnique.

Early American forts hardly resembled European prototypes. colonial fortifications were usually modest and hastily constructed. The most common form was the square, four- or five-bastioned fort, executed in earth, wood, stone, or brick. English colonists, due to a lack of military engineers, had a few forts, and those were usually impermanent. The French colonists had only a few small, impermanent forts along principal

waterways. The Spanish colonists had both permanent and temporary forts, limited to their holdings in what is now Florida.

Continued coastal defense was necessary after the Revolutionary War and consequently the building of forts continued. President Washington encouraged the erection of military fortifications, and in 1794, obtained the needed Federal authorization. This phase of American defensive work, called the First System, consisted of fortification construction in areas previously found open to attack. With insufficient funds and hasty construction necessary, these forts were constructed mostly of earth and were rarely permanent.

President Thomas Jefferson declared in 1801 that coastal fortifications were too costly in terms of both funds and manpower. No further appropriations were made for six years. More substantial fortifications were under the Second System, created in 1807. This program had greater financial resources, and was the first project directed by American engineers. Second System fortifications were generally of three types: open batteries, masonry-faced earth, or all-masonry forts. the most important development during this time was the casemate. Casemates are the chambers within the structure of the fort, and were useful because huns could be positioned within the walls and fired out through openings (embrasures) in the walls, thereby protecting both gun and artilleryman. Also, guns mounted in casemates could be supplemented by huns mounted in Barbette (atop the rampart) thus allowing for two tiers of armament.

Second System fortifications, however, were still not adequate for the coastal defense of the United States. Many of the forts were built of earth and timber and inherently weak. Likewise, there had been no long-range planning with regard to a coherent, interdependent system. By the War of 1812, although all major coastal towns were fortified in some measure, they lacked any organization or master plan.

Even in 1807 as tension with England was again mounting, nothing was done to repair the works at Old Point Comfort. What was done elsewhere was impermanent and soon destroyed by the British in the War of 1812. It was during this war that British ships sailed into the Chesapeake Bay unhindered by the ruinous defensive works at Old Point Comfort. They razed the city of Hampton and then sailed up the Bay to the Potomac and laid waste to Washington, D.C. This ultimate humiliation finally convinced the United States government of its coastal vulnerability. Recognizing the serious shortcomings of the coastal defense, congress authorized in 1816 the hiring of 1817, the Executive and Legislative branches of the government were coordinating a

comprehensive system of coastal fortification. Old Point Comfort was designated as a crucial site for defending the Hampton Roads and Chesapeake Bay.

Because the United States lacked experienced fort engineers, it hired Frenchman simon Bernard to advise the Americans on fort design. It was argued that hiring a foreign engineer to coordinate the forts would leave the United States vulnerable were it ever to be at war with France. However, because France was an ally during the Revolutionary War and since Lafayette personally recommended Bernard, he was hired without further question. In addition to designing forts, Simon Bernard and a group of American compiled the objectives of the coastal defense.

They recommended a comprehensive plan which included fortifications but also relied on the combined efforts of the navy, regular army, and organized militia, and land/water interior communication. Furthermore, this advisory board delineated the goals of the American forts: to close important harbors to an enemy and secure them for the navy; to deprive the enemy of a strong position and prevent their landing; to cover American cities from attack; to position and prevent their landing; to keep harbors open for our shipping; to cover interior navigation; and to cover great naval establishments. The Third System, or Great System, was the product of this effort. Fortifications in this system were to be permanent, and were to be located not haphazardly, but in strategic locations where they could be interrelated and interdependent upon each other.

Surveys were made of the Chesapeake Bay and predictably Old Point Comfort was selected as the site for a substantial enclosed work. By April 1817, even before the entire national defense project was complete, Colonel Armistead was sent to Old Point Comfort to collect materials for the fort. Both he and his assistant, 1st Lieutenant Theo w. Maurice, began examining quarries. On July 25, 1818, they signed a contract with Elijah Mix for 150,000 perch of stone from the York River. When the builders received the first shipment of the stone on September 15, 1818, it was found to be structurally weak and Mix was required to relinquish the government contract or obtain stone elsewhere. Mix found quarries with suitable stone on the Potomac River, near Georgetown.

Construction on the fort began in March 1819 with Major Charles Gatiot as superintendent and Bolitha Laws as contractor. At this point, the construction cost of what would later be called Fort Monroe was projected to be $816,814.96. Fort Monroe was only part of a two-part defensive work at or near Old Point Comfort. Its complement, Fort Calhoun (later called Fort Wool) was located on a nearby shoal called the Rip Raps.

The design of Fort Monroe is attributed to Simon Bernard and although is not Bernard's only work in the United States, it is his largest. Some scholars consider Fort Monroe to be the largest defensive structure in the world not enclosing a civilian community. As designed, Fort Monroe was a regular work, with seven fronts covering about sixty-three acres of ground and surrounded by an eight-foot deep moat.[9] As constructed Fort Monroe was not a regular hexagon. This was partly on purpose, partly by accident. The fronts of the fort where artillery were to be concentrated are longer than the landward fronts. The southern face (comprised with an intermediate bastion), as it overlooks the Hampton Roads and Chesapeake Bay. While constructing the west side of the fort, quicksand was discovered and consequently that section of the fort was relocated, thus changing the original regular-hexagon shape.

The fronts are identified by number and the bastions by compass points. Fort Monroe was designed to concentrate the artillery in the first, second, third, and fourth fronts (those overlooking the water). The first, second, and third fronts were constructed with casemates to allow for the stacking of artillery in tiers. The fourth front was designed without casemates(i.e., solid) to position the most structurally sound front to face the open sea. Between the fourth front and the shore, a Water Battery was constructed to compensate for the single layer of guns on top of the fourth front. The remaining fronts were not related to seaward defense. Of these remaining fronts, only the fifth front, which covered the land approach from the beach, had any casemates and those were only to allow the protection of the Water Battery. In front of these landward fronts, redans were formed and ditch was dug to connect Mell Creek to one of the moat tide gates.

Although construction started in 1819, the property still belonged to the Commonwealth of Virginia. Two acres had been ceded to the United States in 1799 to erect a lighthouse; however, not until March 1821 did the General Assembly and the Governor convey two parcels of 250 acres (Fort Monroe) and 15 acres (Rip Raps) to the United States. It is not known why this deed was not executed until 1838.

During 1818 and 1819 "at Old Point Comfort, wharves, roads, machinery, workshops, barracks, and quarters were built and large quantities of materials were collected. . ."[10] Work progressed steadily and by 1821, construction was described as two-fifths completed. By this time, a canal following the lines of the moat had been dredged to allow the floating of materials on barges to specific construction sites. The projected completion date was 1826. By the spring of 1822 the fort was described as three-quarters finished and by fall of the next year, its appearance

was formidable. At that time the Chef Engineer reported: ". . . the exterior wall, ten feet thick at its base, is carried on an average all around the place to a height of twelve feet, and constructed, capable of receiving forty-two pieces. . ."[11]

Construction at Fort Monroe proceeded satisfactorily but the fort was far from complete in 1826. Builders were still at work in 1832 but construction was then suspended when a malignant cholera epidemic struck the work force. By 1834 construction was nearly complete and revised cost estimates placed the total expenditures at Fort Monroe at $1,889,840, much to the chagrin of Congress. Although Colonel Gratiot, the supervisory engineer, reported to the Secretary of War in 1836 that Fort Monroe was finished, minor improvements to the structure (replacing the earth slope of the moat counterscarp with a permanent revetment) continued through 1843. The Civil War found the fort in a reasonable state of defense.

The completion of Fort Monroe ended the 238-year history of impermanent defensive works at Old Point Comfort. Since that time, Fort Monroe has endured numerous hurricanes and has participated in several battles, both directly and indirectly. Further site development after its completion has been limited to the construction of hundreds of buildings which provide military office space, educational facilities, and quarters for personnel stationed at Fort Monroe.

B. Military History

As the largest fortification in the coastal defense system of the United States, Fort Monroe has served a far greater role that of typical harbor defense fortification. Once responsible for defending the vital Hampton Roads and Norfolk Naval Base, Fort Monroe has also served as an important headquarters, arsenal, and training center for the United States Army. Due to is immense size, Fort Monroe has a flexibility that has allowed it to have multiple role: defense, training, launching, and arsenal, thereby adapting to the multiple needs of the Army.

Before the fort was entirely completed, the Artillery Corps for Instruction, soon thereafter renamed the Artillery School of Practice, was established at Fort Monroe by General Orders #18, Adjutant General's Office, April 5, 1824. From 1803 to 1819 the United States more than doubled in size with the Louisiana Purchase and the annexation of Florida. At a time when the small Regular Army was thinly deployed guarding the newly-acquired territory and fulfilling other duties, one-third of its artillery corps, approximately ten companies (600 soldiers), and one-tenth of its infantry was garrisoned at Fort Monroe. The Artillery School of Practice was the first service school of the Army. In

order to encourage uniformity in doctrine, method, and technique, the curriculum included artillery exercises, gunnery practice, laboratory work, and arsenal construction.

It was hoped that Fort Monroe would become the center of artillery development in the United States. Numerous alarms and excursions, however, make this end difficult to achieve. School operation was suspended from 1834 to 1858 because the garrison was constantly being dispatched to quell uprisings and fight in wars. In December 1830, two companies of artillery were sent to Wilmington, North Carolina, to discourage an insurrection. Three companies were dispatched to aid authorities in putting down the infamous Nat Turner Rebellion in Southampton County, Virginia, in August 1831. The rebellion, however, was put down before their arrival. Most of the garrison was sent to participate in the Black Hawk War of 1831-1832, but a cholera epidemic besieged the battalion en route. Relieved of field duty, the artillerymen returned to the fort in November 1832. Troops were again called for field duty during the Nullification Crisis. From November 1832 to May 1833, five companies were stationed at Charleston, South Carolina. In order to impress Black Hawk with the United States' military might, the Indian was imprisoned at the fort in May and June 1833, after his defeat and capture.

In September 1833, a detachment of eight companies was assigned to Fort Mitchell, Alabama, to assist Federal authorities in the removal of white settlers from land ceded to the Creek Indians in March 1833. After a fairly uneventful tour of duty, the troops returned to Fort Monroe the following april. Due to the incessant need for the garrison in the field, personnel was constantly changing. At a time when the small Regular Army was needed in numerous areas, it was difficult to station most of the artillery in one location. Because it was impossible to maintain a consistent level of instruction at the Artillery School of Practice, the school's operation was suspended April 19, 1834.

Fort Monroe served as a major staging and supply base for expeditions during the Seminole War (1835-1840). The fort became a recruit assembly and training center while the entire garrison was sent to Florida. Recruits form Fort Monroe were briefly deployed in Vermont in 1838 as a precautionary measure during the Mackenzie Rebellion in Canada. Years of relative quiet followed the Seminole War until troops were called for field duty during the Mexican War (1845-1847). The entire garrison was once again sent to war and Fort Monroe became a rendezvous for recruits awaiting shipment to war. From 1848 to 1856, the artillery served various duties throughout the United States. In October 1856 the War Department directed that artillery companies be concentrated at Fort Monroe to form an artillery school of practice for heavy huns. No further action occurred until

January 1858 when the Artillery School was formed. Having the same goals as the previous Artillery School of Practice, with an emphasis on large caliber guns, the school operated until the eve of the Civil War with few interruptions. In October 1859, troops were sent to Harper's Ferry, Virginia, to assist in subduing John Brown's Raid, but Brown's force was defeated before the arrival of the contingent from fort Monroe. With the conclusion of examinations in September 1860, the Artillery School ceased operations.

In addition to serving as home for the artillery school and a base of operations for the artillery corps, Fort Monroe served as headquarters for various geographical departments of the Army. In 1837 Fort Monroe briefly became headquarters for Department No. 4, which encompassed the states of Virginia, North Carolina, and South Carolina. From 1842 until the end of the Civil War, Fort Monroe served as headquarters for a series of military departments.

Due to is role as a center for artillery activity, Fort Monroe grew to be one of the largest arsenals in the country. The laboratory grew from a supply section overseen by one officer in 1833. By 1836 Fort Monroe had become an arsenal with a staff exceeded in number only by the arsenals at Detroit, Pittsburgh, Washington, and Watervliet, New York. Specializing in seacoast armament and the construction of seacoast gun carriages, Fort Monroe was one of four manufacturing arsenals in the United States in 1841.

Probably the most important period in the history of Fort Monroe was the Civil War. As one of the few government installations in the South to remain in Federal control Fort Monroe was a symbol of Union authority on Virginia soil. Fort Monroe played an important role in Black history as "Freedom's Fortress". During the course of the war, great numbers of fugitive slaves sought refuge at Old Point Comfort.

Fort Monroe played a decisive role in the Civil War. By greatly enlarging the garrison, the Federal government created a second front in Virginia which drew Confederate troops away from the main army threatening Washington, D.C., during the summer of 1861. The strategic role of the fort changed from one of defense to one of offense. The powerful batteries of Fort Monroe closed Hampton Roads and the James River to shipping vital to the Confederate war effort. The fortification operated as a staging area and supply base for Union amphibious assaults along the Atlantic seaboard and as launching point for General George B. McClellan's famous Peninsula Campaign of 1862. It is ironic that Fort Monroe, which was constructed to defend against a foreign, seaborne invasion, became a great weapon against the state and

region for which it was built to defend.

Union forces were able to maintain control of Fort Monroe because Virginia was one of the last states to secede. By the time Virginia mobilized and deployed its militia, Fort Monroe was sufficiently reinforced to with stand attack. The confederates had neither siege artillery nor navy to enforce a siege. Fort Monroe had excellent naval support and its location was not conducive to formal siege tactics. However, "...any fortification can be captured if the attacker has the resources and sufficient desire. No record has been found of any Confederate intention to attack the fort."[12]

During the war, some notable "firsts" occurred at Fort Monroe because of is location close to the front lines. Slaves seeking refuge at the fortification in May 1861 were for the first time classified as "contraband of war" by commander General Benjamin F. Butler. The name "contraband" became a popular term for runaway slaves because the term "freedman" was not entirely accurate. Early in the war the Chicago Tribune reported the first successful use of fugitive slaves in a combat role "'Contraband' from Fort Monroe crewed a 32-pounder cannon during the assaults against the Hatteras forts."[13] Later in the war some of the first back combat troops were organized at Fort Monroe: the 1st and 2nd U.S. Colored Cavalry regiments and Battery, 2nd U.S. Colored Light Artillery. John LaMountain made the first aerial observation by balloon in July 1861 to reconnoiter Confederate troop positions in the area. On August 3 he ascended form the deck of the first American "aircraft carrier," the small gunboat Fanny, which acted as a mooring. During the assault on Norfolk in May 1862, there occurred the first recorded use of a forward artillery observer. Fort Monroe also witnessed the first battle of ironclad ships when the Monitor clashed with the Virginia (formerly the Merrimack) in Hampton Roads. Fort Monroe's heavy naval guns served to keep the formidable Virginia in Hampton Roads and out of the Chesapeake Bay.

Fort Monroe served as a staging area for strategic assaults along the Confederate seaboard. Amphibious invasions obtained footholds for the Union Army at Hatteras Inlet, North Carolina, August 1861; Port Royal, South Carolina, November 1861; Roanoke Island, North Carolina, January 1862; New Orleans, Louisiana, April 1862; Norfolk, Virginia, May 1862; and Fort Fisher, North Carolina, January 1865.

Two important military campaigns were launched from Fort Monroe. The 112,000-man Army of the Potomac began arriving by naval transport on March 18, 1862, for the Peninsula Campaign. The campaign lasted through May and ended with General McClellan Monroe

defeat on the outskirts of Richmond. In early April 1864 General Ulysses S. Grant arrived at Fort Monroe to plan strategy with General Butler for the upcoming spring campaign. The newly-created Army of the James, under the command of General Butler, was to move against Richmond from the east while General Grant's Army of the Potomac attacked from the north. Forces under the command of Major General Franz Sigel and Brigadier General George Crook were to advance form the west. With the initial objective of capturing the lightly-garrisoned city of Petersburg, the 36,000-man Army of the James sailed from Fort Monroe on May 4. Within two weeks, General Butler's part of the campaign ended in failure. Due to General Butler's ineptitude and lack of initiative, the 750 Confederates defending Petersburg were able to delay the Army of the James until reinforcements arrived. Under the command of General P.G.T. Beauregard, the improvised Confederate Army, composed of 20,000 troops, drove the Army of the James back to its base at Bermuda Hundred on the James River. Entrenched within a bend of the river with its front sealed off by the Confederate force, General Butler's army was, in General Grant's words, "as completely shut off from further operations directly against Richmond as if it had been in a bottle strongly corked."[14]

On February 3, 1865, Union and Confederate commissioners met aboard the River Queen off Fort Monroe for a peace conference. After a long day of negotiations, the talks ended in failure. The Confederates wanted an armistice which would be followed by Confederate independence, but Lincoln insisted that there should be no peace without union. One of the last dramas of the war was acted out at Fort Monroe with the imprisonment of Jefferson Davis, President of the Confederate Nation. President Davis was detained at Fort Monroe from May 1865 to May 1867. Charged with the assassination of President Abraham Lincoln, President Davis was finally cleared of any involvement with the conspiracy, but indicted on a charge of treason. Eventually the latter charge was also dropped when it was decided that President Davis' case was covered by President Andrew Johnson's amnesty proclamation.

The Artillery School was reestablished at the fort November 1867. Except for a few interruptions during Reconstruction, the artillery school operated continuously until the Spanish-American War. To maintain order during elections, three batteries served in the South from October to November 1868. Troops were sent to Raleigh, North Carolina, from July to September 1870 to prevent disturbances during a Ku Klux Klan trial and elections. The garrison was again dispatched in July 1877 to quell labor riots in the South.

In 1885 an advisory board was appointed by President Grover Cleveland to study coastal fortifications and presided over by

Secretary of War William C. Endicott. During the Civil War, the advent of rifled artillery rendered masonry fortifications obsolete. Rifled cannon could fire at greater ranges with more accuracy and higher velocity, thereby having the ability to turn brick and stone to rubble. Other improvements in steam power, weaponry, and naval armor caused the Endicott Board to seek new ways to defend the American coast. The idea of decentralized firepower, which had been around for at least a century, was finally put into operation by the Endicott Board. Under this program, ninety percent of the new coastal armament was to be mounted in detached batteries of concrete protected with earthen parapets. From 1891 to 1908, batteries were constructed along the beach of Old Point Comfort. Although the old fort and its guns were tactically obsolete, Fort Monroe continued to grow in strategic importance as a vital link in the defense of the Chesapeake Bay.

The Artillery School was closed during the Spanish-American War, after almost 30 years of continuous operation, and most of the garrison was sent overseas. At this time, the post hospital was turned into a general hospital. The Artillery School resumed operations on September 3, 1900. After the Spanish-American War, the U.S. Army underwent a major reorganization. Part of that reorganization was the separation of the Artillery Corps regiments into companies of coast artillery and batteries of field artillery. In 1907 the Field Artillery Corps and Coast Artillery Corps were created. That same year the Artillery School was united with the School of Submarine Defense, which was moved from Fort Totten, New York, to Fort Monroe, to create the Coast Artillery School.

In 1911 five companies of coast artillery were sent to Galveston, Texas, as a precaution during the Mexican revolution which had broken out earlier that year. During this period, Fort Monroe witnessed another first in military history. On August 5, 1915, Lieutenant Patrick N. Bellinger of the U.S. Navy conducted the first recorded aerial spotting of artillery fire with a fixed-wing aircraft. He spotted rounds fired by Fort Monroe mortar batteries.

The entrance of the United States into World War I did not cause the closure of the Coast Artillery School but rather a complete readjustment of the training program. The development of heavy mobile artillery for service in the field cause the creation of courses reflecting this change in doctrine. The school continued operation and trained officers, officer candidates, and enlisted specialists. Fort Monroe became a training center for the entire Coast Artillery Corps.

Prior to and during World War I, Fort Monroe served as

headquarters for the Coast Defenses of Chesapeake Bay. This important command was responsible for harbor defenses of the area. Authorities from Fort Monroe oversaw the mounting of antiaircraft guns, the laying of submarine nets and mines, and the training of personnel. Reorganization of the Army after World War I resulted in the discontinuation of the Coast Artillery Training Center and the establishment of the Third Coast Artillery District on May 15, 1923. Between the World Wars, Fort Monroe was designated headquarters for the Harbor Defenses of the Chesapeake. With the appointment of Brigadier General Stanley D. Embick as commandant of the Coast Artillery School in September 1930 came an emphasis on the value of antiaircraft artillery in the defense of harbors. With the development of the aircraft carrier and long-range bomber, this doctrine showed considerable foresight. Doctrine was changed and training perfected to bring antiaircraft artillery on par with seacoast artillery.

During World War II, Fort Monroe was headquarters for the Chesapeake Bay Sector. The guns no longer played an important part in the defense of Chesapeake Bay, but as a regional defense center, Fort Monroe controlled the inner mine field, the antisubmarine net and gate, and shipping in Hampton roads. Hampton Roads became the second largest Atlantic base for overseas operations and a major training center for armed forces during World War II.

The future of Fort Monroe was uncertain after World War II. The development during the war of carrier-based aircraft as a potent offensive threat rendered coast artillery and fixed fortification obsolete. Once again, however, the role of Fort Monroe was changed and its importance expanded. On April 1, 1946, it was announced that Fort Monroe would become headquarters for Army Ground Forces. The Army Chief of Staff wanted Army Ground Forces and the Tactical Air Command to be located within close proximity of each other. After a survey of potential locations, the Fort Monroe-Langley Field area was recommended by Army Ground Forces. Fort Monroe was well suited because of its facilities and location near Washington, D.C. The Coast Artillery School was moved to Fort Winfield Scott, California. In August 1946, Fort Monroe was with drawn form the Harbor Defenses of Chesapeake Bay. Army Ground Forces announced in May 1947 that all harbor defense installations and facilities would be processed for surplus. As headquarters for the command of the armies of the continental United States, Fort Monroe continued in use as a highly important Army post.

In March 1948 the Army Ground Forces was redesignated Office, Chief of Army Field Forces. Relinquishing its administrative responsibilities over the armies to concentrate more on training,

the new organization was in operation until February 1, 1995, when it was changed to Headquarters, Continental Army Command (CONARC). CONARC maintained the mission of training and assumed direct command of the continental armies. Renamed United States Continental Army Command in 1957 and reorganized in 1962, CONARC commanded the Continental Armies, the Army Reserve, and the Army training bases. Responsible for achieving combat readiness of U.S. Army units in the United States, the training of officers and enlisted men, and for operating and managing Army installations and resources, CONARC played a major, though indirect, role in most of the major military operations since World War II.

In 1973, CONARC was phased out and replaced by the United States Army Training and Doctrine Command (TRADOC). Still at Fort Monroe today, TRADOC is responsible for individual training, education, and combat development. Training centers, service schools, combat development functional centers, training oriented installations, and the Reserve Officers Training Corps are under the administration of TRADOC.

Although its roles have changed over the course of history, Fort Monroe has managed to increase in importance through time. to this date, Fort Monroe continues to carry out one of its original missions: training in uniformity of doctrine, method, and technique. That training mission, however, goes beyond the artillery branch and encompasses the entire Army.

II. ARCHITECTURAL DEVELOPMENT

Presently, Fort Monroe is a collection of 234 permanent buildings and 74 temporary structures of varying architectural styles, sited randomly, for the most part, on over 580 acres of land. As the Fort and earliest buildings date to ca. 1820 and construction at Fort Monroe has continued ever since, the architecture at the Fort is representative of many periods. Construction in most easily divided into four periods: 1819-1860, a period dominated by the construction of the fort and essential military buildings; 1861-1899, a period dominated by Civil War-related construction, an Army building renovation campaign, and battery construction; 1900-1929, a period dominated by colonial and Neo-Classical Revival construction and alterations; and 1930-1961, a period dominated by Depression-related work projects and World War II clapboard, temporary building construction.

A. 1819-1860

Initial construction at Fort Monroe was not limited to the building of the fort. Living quarters, workshops, stables, and storage sheds wee likewise needed at the site, both inside and

outside the walls of the fort. The majority of these buildings were unpainted brick construction with slate roofs. Fenestration was symmetrical and full-facade porches sheltered the pianos nobiles (in Renaissance architecture and derivatives, a floor with formal reception and dining rooms; the principal story of a house, usually one flight above the ground). Of the nearly 150 buildings constructed before 1860, there remain sixteen (including the individual fronts of the fort) at Fort Monroe. Although the majority of these buildings are within the walls of the fort, this does not mean that antebellum construction was concentrated there. Despite the apparent absence of a master plan, buildings associated with fort construction (workshops, some engineer's quarters) tended to be outside the fort walls and those buildings related to military operations were usually located inside the fort. The majority of the structures built before the Civil War were temporary and even portable, subject to change of site or function; consequently, none remain. Predictable, the few permanent buildings received the most care in design and construction and most of these remain.

Extensive records of the site construction exist, primarily in the form of maps which were drawn every few years by the United States Army. Not only do these maps locate the intended and actual temporary and permanent building sites, but also show the elevations of the more substantial living quarters, casemates, hospitals, and barracks. These renderings are usually small yet highly detailed drawings in the margins surrounding the larger drawings of the fort and its environs. Because so few antebellum buildings remain at Fort Monroe, these maps offer the best means of studying the early architecture at the military installation. Photographs and correspondence offer insight to the later alterations and demolitions of these structures. In order to examine the architectural history of Fort Monroe, it is useful to organize the discussion chronologically, grouping the buildings by location and function: initially discussing the extant structures within the walls of the fort which had military usage, the non-military buildings within the walls , military structures outside the walls, non-military structures outside the walls, and concluding with noteworthy non-extant antebellum structures.

The antebellum architecture which still stands at Fort Monroe is dominate by the fortification itself. This complex building assemblage of granite and brick, surrounded by a moat, which was essentially complete in the 1840s, provides on obvious organization to the buildings at the post. The pre-Civil War structures still standing inside the walls of Fort Monroe are Buildings 1, 17, 18, 50, and 166. Of these, the rooflines of Buildings 1 and 17 appear on the earliest (1818) maps and the front and side elevations of Buildings 1 and 17 (17 is identical to 18) appear on maps the following year. Constructed of brick

and designed to be permanent officers' quarters, these buildings remain among the most handsome on the post.

Built in 1819, Building 1 is sited on axis with the east gate of the fort. As designed and originally constructed, these quarters were large: three-story (two floors atop and above-ground basement) central block with flanking, two-story wings (one floor atop an above-ground basement). In 1823, a kitchen outbuilding was constructed in line with the main house. This structure was two stories tall (the kitchen atop a basement cistern) and close enough to the main house to allow an elevated walkway to connect the elevated kitchen to the first floor of the quarters in 1829. The plan of the central block of the house is double-pile and Georgian in proportion. Earliest elevations depict a grand stairway leading to the entry on the piano nobile. This entrance was sheltered by a small entry porch which supported a second-story balcony. Ornament was minimal, in the form of brickwork detailing around doors and windows. This building has been greatly altered since its construction, having been painted white and having received porches on all floors on the front elevation. Building 1 is unique and provided no other building with prototypical designs. Although the quarters have porches on all floors which makes Building 1 similar to scores of other buildings currently at Fort Monroe, the porches are not original to the design, having been added between 1870 and 1890. In the 1843 map of Fort Monroe, Building 1 is surrounded by formal gardens and parterres setting it off from the surrounding landscape which by that time had been cleared of rubbish but was still sparsely planted.

Buildings 17 and 18 were among those buildings originally planned for the post, appearing in the earliest Army maps; however, they were not built until 1823. Called the Tuileries, these buildings were designed to house eight bachelor officers each. Like Building 1, they were two-story, red brick dwellings over an exposed basement; however, unlike Building 1, the Tuileries had full-facade, one-story porches on both front and rear piano nobile levels accessed by gracefully curved stairs. These buildings, too, have been seriously altered since their construction. A porch was added above the original porch, the curving stairs were removed, kitchen wings were added in the back where originally had been more porches, entry was relocated to the side of the building, and these quarters were painted white.

As originally designed and constructed, the Tuileries were more representative of the permanent military buildings constructed at Fort Monroe between 1818 and 1860. The building methods prevalent at this time were dominated by the use of red brick and slate on rectangular forms with porches running the length of the piano nobile, over-hanging the above-ground basements. It

appears that all army buildings which were needed to shelter numerous people took on not only the same appearance but also the identical plans. By 1843, the permanent buildings, Carroll Hall (larger, bachelor officer quarters, demolished 1900), the hospital (demolished ca. 18550, and the barracks (demolished ca. 18500, shared all these characteristics. The only variation involved the optional use of dormers, or the rare building that was one and not two stories tall on an above-ground basement.

Although these buildings tended to be oriented parallel to the nearest fort front, they often faced away from the fort and overlooked the Parade Ground, an irregularly shaped interior space roughly centered within the fort walls. The Parade Ground was in use from the start of the fort and was cleared and levelled in 1824 in preparation for Lafayette's visit that year. Interestingly, the Parade Ground does not appear in labelled form until the 1827 U.S. Army map.

The early permanent buildings which did not survive include Carroll Hall, the barracks and the hospital. Carroll Hall was demolished at the turn of the century to allow for the construction of Building 9 in 1900. Located in the northwest bastion, the earliest maps label Carroll Hall as a hospital. It appears that it was never put to this use, having always been used for bachelor officers' quarters.

Carroll Hall was of historical significance in that Jefferson Davis was incarcerated there (October 2, 1865-May 3, 1866), having been moved there from his cramped, damp Casemate #2 in the fort's first front. Carroll Hall was representative of early permanent architecture at Fort Monroe. It was long, rectangular brick block with porches running the length of the front facade. Photographs from the 1890s reveal that at some time, the building was painted white.

The history of the enlisted men's barracks is convoluted. It appears that some form of barracks was on the site currently occupied by the 1879 barracks. An 1832 map of Fort Monroe shows a long rectangular building on the site, parallel to the landward sixth front, on axis with the gate. The elevation of the barracks shown on the 1832 map reveals a building similar in material and shape, though having fewer stories than the contemporary structures. Although the plans and elevations depict a substantial masonry building, it appears that all the barrack ever on the site were temporary until the present barracks were constructed in 1879. The Surgeon General condemned one of the first barrack whose floors had pulled away from the walls allowing a clear view of the Parade Ground. Located near the main Gate, the hospital resembled a much-truncated version of Carroll hall. Built of brick, the hospital also had a full-

length porch on its facade. The hospital remained in use until after the Civil War, at which time it was replaced by a larger facility outside the walls of the fort.

The only extant, non-military, antebellum structure within the walls of Fort Monroe is the Chapel of the Centurion. Derived from designs for a small, rural church published by Richard Upjohn in 1852, the chapel does not resemble any other pre-civil War building on post. Its history and architectural significance are noteworthy. On June 22, 1855, Lieutenant Julian McAllister of the Fort Monroe Ordinance Department and Artificers Francis M. McKnight and Henry Sheffis accidentally detonated a mixture of pyrotechnics while working in the Fort Monroe Arsenal Laboratory. McKnight was killed instantly and Sheffis died three days later. The recovering Lieutenant vowed that if he survived, he would commission a post chapel for Fort Monroe. In 1857, having received generous endowments from McAllister and support from the Diocese of the Protestant Episcopal Church of Virginia, Captain Alexander B. Dyer acted as agent and superintendent of the construction of the post chapel, dedicated to Cornelius the Centurion. Construction was completed by year's end and the Chapel of the Centurion was consecrated by Assistant Bishop John Johns, May 3, 1858. The Chapel has been the setting for numerous weddings and funerals significant in the historical significance because of its design and its stained-glass window memorials. the design of the Chapel has been traditionally attributed to Richard Upjohn, proponent of the Gothic Revival in the United States. The most significant stained-glass windows are from the Tiffany Glass and Decorating Company, two dating from ca. 1890 land the third from 1911.

Two other antebellum buildings still stand at Fort Monroe; however, they were constructed outside the walls of the fort. The older of the two is the lighthouse (constructed in 1802) which predates even the first known surveys of Old Point Comfort. It appears on the earliest maps from 1818. In 1798, Congress authorized the Secretary of the Treasury to contract for the building of a light house at Old Point Comfort. Three years later, it was decided to build two additional lighthouses at nearby New Point Comfort and Smith's Point. Benjamin Henry Latrobe was asked by William Miller, the commissioner of revenue in the U.S. Treasury Department, to design all three buildings. Latrobe worked on the plans but later declined the commission when he discovered that the money appropriated for the three light houses would not pay for the construction and his fee. The present lighthouse was constructed in a simple, octagon-shaped plan with an interior spiral staircase which utilizes a medieval stair-construction method in which each riser is keyed into the wall in addition to being supported on the riser beneath.

Building 27 was one of the last buildings constructed before the Civil War. It was erected in 1860 to replace the Ordinance building destroyed by the accident involving Lieutenant Julian McAllister. Building 27 remotely resembles the earliest permanent buildings at Fort Monroe. Built of brick and rectangular in form with a large, rear ell, it also has jack-arch window detailing like Buildings 1, 17, and 18, Carroll Hall, the barracks, and the hospital. However, the Ordinance building is only one story tall and has windows larger than any others contemporary to it on the Post.

There were numerous other notable buildings at Fort Monroe which were constructed before the Civil War but have since been demolished. Not all of the engineers, workmen, officers, and enlisted men could be accommodated in the permanent and temporary quarters ar the fort. Consequently, guest houses, inns and hotels were among the earliest structures near the fort. In 1821, Colonel Gratiot, the Supervisory Engineer, granted permission to William Armistead to construct what would become the Hygeia Hotel. Named for the Greek Goddess of Health, the Hygeia prospered and was enlarged numerous times and finally demolished during the Civil War and later rebuilt on a different site. The antebellum Hygeia survives in the form of numerous photographs showing the hotel to be classically-inspired and imposing. By the 1850s Old Point Comfort had become a fashionable sea-side resort.

The Sherwood Inn was constructed in 1843 on Ingalls Road as a combination trading post, eatery, and hostelry. The massive, shingled structure was acquired by the federal government and used as an Officers' Mess and quarters until 1932 when Randolph Hall was completed. The Inn was razed soon after.

After the construction of the Chapel of the Centurion, the Catholic Church received permission to erect a Catholic Chapel, Saint Mary's Star of the Sea, outside the walls of the fort. Constructed in 1860, this church was a somber wooden building with a steeply-pitched roof over the nave and shed roofs over the flanking aisles. The entry was emphasized by a large belfry. This church was replaced by a dissimilar stone chapel in 1903 after a fire; however, the 1860 cornerstone remains.

The few antebellum buildings that remain at Fort Monroe are not only the most historically significant structures at the post but also are among the most architecturally significant. These building represent the living conditions at Fort Monroe in is formative years and the care that was taken in their design and construction as the earliest permanent structures at the post. although altered since their initial construction, Buildings 1, 17, 18, 27, 50, and 166, and the fortification and the early

goals of the fort as a training center and strategic defensive work.

B. 1861-1899

This period was dominated by Civil War-related construction, an Army building renovation campaign (1875-1899), and battery construction. During the Civil War was probably the most important period in the fort's history, none of the structures built at that time stand today. Following the Civil War there were drastic cuts in military spending, and consequently there was little construction at the post. The oldest extant structures at Fort Monroe from this period are the result of an Army building program begun nationwide in 1874. The objective of the program was to improve living conditions at Army posts. From 1875 to 1894 seventeen extant quarters were constructed inside the fort and along Ingalls Road. Permanent and substantial housing was erected at Fort Monroe while older, temporary buildings, many of which dated form the Civil War, were demolished. During this period there emerged the use of standardized quartermaster plans land the widespread use of the duplex as a form of Army housing. Also during this period batteries, under the Endicott Plan, were constructed at Fort Monroe to increase artillery range and improve coastal defenses near the Chesapeake Bay.

Virginia seceded from the Union on April 19, 1861, and by April 28, the Fort Monroe garrison had increased to 2,000 troops. The fort quickly reached its capacity and troops were accommodated at Camp Troy, which later became Camphamilton, across Mill Creek. Docks were filled with vessels and stores, and numerous wood-frame structures were erected. Shops and warehouses were constructed during this time near the wharves. Quarters for Ordinance Department employees were built north of Building 27, the new machine shop for the Fort Monroe Arsenal. Inside the fort, offices for the commandant, adjutant, and sergeant major were erected near the East Gate. Structures were also built for the hundreds of fugitive slaves that sought refuge at the fort. The "contraband" were put to work for the Union Army as laborers.

By 1862, seagoing traffic had increased greatly so that the Baltimore and Quartermaster wharves were construoted. The Hygeia Hotel, which stood on the glacis (the bank of earth in front of a fort counterscarp) of the fort near the Main Gate, had become a social mecca during the 1850s. During the early part of the Civil War, it was continuously occupied by tourists, salesmen and newspaper correspondents. In order to discourage unwanted visitors at the fort, the Hygeia was demolished December 1, 1862. Part of the hotel, a detached section next to the postern gate, was used for some time as a hospital.

During the war, there were numerous shops, warehouses, stables, and quarters located at the fort to support the activities of the military organizations stationed at Old Point Comfort. Facilities for the Ordinance Department, Quartermaster Department, and Corps of Engineers were located, as a general rule, outside the fort, while the Artillery Corps was stationed inside the fort. The Ordinance Department operated the gun yard, which was located on the site of Buildings 133 and 134, and the Ordinance machine shop of the Fort Monroe Arsenal, Building 27. Around these two complexes were quarters for military and civilian employees working for the Ordinance Department. The Ordinance Department also controlled several offices, quarters, and storehouses within the fort. Across the road from the Ordinance machine shop was located the Ordinance coal yard. Adjoining the Ordinance coal yard to the south was the Quartermaster coal and wood yard. The Quartermaster Wharf was located on Hampton Roads directly behind the coal and wood yard, and dwellings for Quartermaster employees were located around St. Mary's Church.

The Quartermaster department controlled storehouses and a mess near the gun yard and the Chief Quartermaster's office next to the Baltimore Wharf, at the foot of present-day Ingalls road. offices and quarters for the Corps of Engineers were located between the Baltimore Wharf and the Engineer Wharf, the latter of which was near the lighthouse. The houses before the first front of Fort Monroe were controlled by the Corp of Engineers. Within fort Monroe were quarters for officers and enlisted men of the Artillery School, and near the Main Gate was the post hospital.

Maps drawn of fort Monroe soon after the Civil War show the Baltimore Wharf located at the foot of present-day Ingalls Road, which was constructed in 1862 to handle the heavy sea-going traffic at old Point comfort. In the northwest bastion of the fort stands Carroll Hall, where Jefferson Davis was imprisoned from October 1865 to May 1867. Seven barracks are located near the North Gate. Poorly constructed of green lumber, these temporary structures were razed to make way for Building 5, the Old Main Barracks, which was constructed in 1879. Outside the north bastion stands the advanced redoubt. On this site construction for the first Endicott coastal fortification began in 1891. Efforts were made to sink wells at Old Point Comfort form 1867 to 1870 and 1871 to 1872. Both attempts ended in failure. In March 1871 the Officer's Club was moved to the Flag Bastion.

Although the Army construction had been reduced considerably, commercial enterprise at Fort Monroe continued to expand. The Hygeia dining Saloon, constructed next to the Baltimore Wharf in 1863, was enlarged in 1868 into the second Hygeia Hotel, a

tremendous French Second Empire structure. The Sherwood Inn was acquired by Mrs. S.F. Eaton in 1867 and converted from an eating house into a hotel.

In June 1874, Congress began appropriating money for renovation and construction at Army posts. From 1875 to 1898, thirty-one extant structures were built at Old Point Comfort which still stand. Seventeen of these structures were quarters, part of a nationwide plan to upgrade living conditions of officers and enlisted men and to consolidate troops in larger, more attractive installations.

In 1875, Buildings 3 and 16 were constructed inside the fort. Both structures are constructed of brick and had one-story porches with brackets, spindlework, and jigsaw-cut balusters. Known as the Subtuilleries, Building 16 was make similar in appearance to the adjacent Tuilleries, which were built in 1823, when they all received Colonial Revival porches in 1908. Building 3 had its decorative elements removed and replaced with Colonial Revival details in 1910. Building 3 is a variation of the duplex, a housing form which became very popular with the Army during this time period. Building 15, a duplex overlooking the Parade Ground, was constructed in 1878 and based on a design published in 1872 by Quartermaster General Montgomery C. Meigs.

Also constructed from this plan were Buildings 62, 63, and 64 (the latter burned in 1945). Buildings 15, 62, and 63 are of wood construction and have Queen Anne decorative elements. Building 5, known as the Old Main Barracks, is constructed of brick and has a mansard roof over the projecting central pavilion. Constructed in 1879, it is a huge structure that dominates the Parade Ground. These buildings (3, 5, 15, 62,63), along with later structures built during this period, form an integral group which helps define nineteenth-century architectural character of the fort's interior.

From 1875 until the turn of the century there was a great amount of construction at Old Point Comfort. There are thirty-one structures on the post today that were built during that period. The Army instigated a building renovation program in 1880 which included Fort Monroe. That year, the Army post received $34,000 and in 1881, $20,00. These funds were put to use in the construction of new, permanent quarters and the destruction of old, temporary structures. Although Fort Monroe did not participate in the building program to the extent of some posts which had more stylish and substantial housing, the program had a great impact of the appearance of Old Point Comfort. Building 19, a wood structure with Queen Anne details, was constructed in the southwest bastion in 1880 and is one of the few extant single-family dwellings constructed during this period. Its

design has been identified as a standardized experimental plan which is similar to that of Building 55, which was built outside the fort in 1886. A brick firehouse, Building 24, was erected near the Main Gate in 1881. Building 93, constructed in 1884 as the arsenal commander's quarters, is a brick structure with a two-story porch. Constructed of brick in 1889 for civilian employees, building 61 was recently restored to its original gothic revival appearance.

From 1890 to 1894, seven identical buildings (Buildings 65, 66, 67, 68, 69, 70, and 79) were erected along Ingalls road. These structures are wood variations of a limestone prototype constructed at Fort Riley, Kansas, in 1889. The plans are attributed to Captain George E. Pond, Quartermaster, and were circulated in 1891 as Quartermaster Standard Plan 28. These structures, with the exception of Building 69, were stripped of most of their Queen Anne decorative elements during the 1950s and 1960s and were painted white. Plans have recently been approved to repaint the duplexes in darker colors, which will restore some of the buildings' Victorian-era character. In 1894 Building 77, the Fort Monroe Headquarters building, was constructed. buildings 80 and 81, visitors' quarters originally constructed as bachelors' quarters, were built in 1897. The hospital received additions in 1904, 1913, and 1941. Alterations and remodelling have resulted in a Colonial Revival structure which is now used as a post health clinic. The post office, which is Fort Monroe's only example of Romanesque Revival architecture, serves as a landmark at the intersection of Ingalls road and Fenwick Street, the post's main thoroughfares, and overlooks Hampton Roads.

During the period 1884-1898, thirteen structures were erected along Ingalls Road. These buildings were instrumental in the development of Ingalls Road as a major axis and contribute significantly to its architectural character. Also helping in the evolution of the street was a new iron pile bridge, constructed in 1890, across Mill Creek. Using part of a $175,000 appropriation for wharf construction and repair, the Army constructed a new wharf in 1889 on the site of the Baltimore Wharf. The new wharf and the first Chamberlin Hotel, constructed from 1890 to 1896 across from the Hygeia Hotel, served as anchors for development at the foot of Ingalls Road.

During the 1890s, the infrastructure at Fort Monroe was improved considerably. A streetcar railway, connecting the post with Phoebus, was built circa 1893 and license was granted in November 1895 to the Chesapeake & Ohio railroad to extend its railhead to Old Point Comfort. Fort Monroe was further modernized with the installation of electric power circa 1895 and sewage system in 1896.

C.Endicott Period Battery Construction: 1891-1908

Before the Civil War the 10-inch Rodman smooth bore was the largest artillery piece at Fort Monroe. Firepower increased during the war from 2,000 foot-tons to 6,865 foot-tons after the war. Although great strides in the development of artillery occurred during this time, coastal batteries still contained smooth-bore cannon up until the spanish American War. Center-pintle platforms for 15-inch guns were laid in the Water Battery in 1866, and in the Fourth Front and the Covert Way in 1869. Apart from these improvements, only minor repairs and maintenance occurred at the fort until the 1890s.

Partial funds were appropriated from 1873-75 for modifications prepared by the Board of Engineers for fortifications for Fort Monroe. Some emplacements were constructed but the guns were never mounted. Plans called for a battery of ten guns outside forts one, two, and three and an open battery to the right of the Water Battery. Heavy guns were to be mounted in the salients of the main work and the advanced redoubt. Little work was accomplished and construction was halted in 1886 pending the findings of the Endicott Board.

The Endicott plan was ambitious. For the Fort Monroe area, the Board recommended turrets, armored casemates, barbette batteries, mortar batteries, submarines, and eighteen torpedo boats. The initial appropriation for Hampton Roads in 1891 was $151,848 and was to be used in the construction of a battery of two 10-inch guns. The availability of steel and the ability to produce it in massive forgings insured quality cannon. Machined breechblocks allowed breechloading guns (guns which could be loaded through the rear, as opposed to through the barrel, as previously), an additional improvement in weapons systems. Under the Endicott plan, Fort Monroe received 10- and 12-inch disappearing rifles, 6- and 8-inch barbette guns, 3-inch barbette rapid-fire guns, and 12-inch mortars.

Construction began on Battery A, a two-gun battery composed of 10-inch disappearing rifles, in 1891 and concluded in 1897. Redoubt A was built on the site of the advanced redoubt and later renamed Battery Bomford. Redoubt B, a single 10-inch disappearing rifle emplacement, was constructed during this period and eventually became part of Battery Church. In March 1895, $100,000 was allotted for sixteen 12-inch mortars and one 10-inch gun battery. The gun mortars and one 10-inch gun battery. The mortar emplacements, located north of Redoubt B and known as Battery Anderson and Battery Ruggles, and the 10-inch rifle, mounted on an experimental carriage and designated Battery Humphreys, were completed in 1899.

With war against Spain looming on the horizon, the United States accelerated its building program in 1898. Battery Barber, an 8-inch rifle and 12-inch mortar, was constructed in 1898 on the northern end of the Water Battery. Several other batteries were begun in 1898: a 10-inch gun emplacement was added to Redoubt B which was completed in 1901 and named Battery Church; Redoubt C, a battery of two 10-inch disappearing rifles located northeast of Redoubt A, was completed in 1901 and eventually named Battery Eustis; a battery of three 12-inch disappearing rifles, located between Redoubts B and C, was completed in 1901 as Battery DeRussy; a battery of four 4.72-inch rapid fire guns was completed in 1899 on the barbette of the Fourth Front and designated Battery Gatewood; four 8-inch rifles were mounted temporarily on the rampart of the fort; and one 10-inch depressing gun was mounted in the bastion near the East Gate.

Improvements in ordinance, range-finding equipment, and fire-control equipment led to revisions in the Endicott plan as construction progressed. The four 4.72-inch rapid-fire guns and the 10-inch depressing gun were removed after the turn of the century. In 1900, construction of a battery of four 15-pounder rapid-fire guns began on the main channel opposite Fort Wool. The guns were mounted in 1902 and 1903 and removed following World War I. Battery Parrot, directly adjoining Battery Irwin, was begun in 1901. Composed of two 12-inch disappearing rifles, which were the most powerful guns ever mounted at Fort Monroe, Battery pirouette was completed in 1905 at a cost of $211,500. The construction of the battery resulted in the demolition of the Water Battery. Construction on Battery Montgomery, composed of two 6-inch rifle emplacements, was begun in 1901 and concluded in 1904. Battery Montgomery was located between Battery DeRussy and Battery Church. In 103, $165,000 was appropriated for the construction of six 6-inch disappearing rifles. The fortifications were completed in 1908 and divided into three two-gun batteries. Known as Batteries Ferdinand Claiborne, Alexander Dyer, and Horatio Gates, these emplacements were the last to be built at Fort Monroe under the Endicott Program. Prior to World War II, the 16-inch gun was adopted as the primary weapon in fixed-harbor defenses. A modernization program begun in 1940 selected Fort Monroe as the site of one 16-inch battery. In November 1942, before construction began, the Fort Monroe battery was eliminated from the program because of its low-priority status. Following World War II, Army Ground Forces decided that fixed, permanent coastal-defense fortifications were obsolete and began processing them as surplus.

D. 1900-1929

Before the turn of the century, the Artillery corps encompassed both field and coast artillery; in 1901, they became separate

units. Due to this reorganization, the number of officers receiving training in coast artillery at Fort Monroe increased during the first years of the twentieth century. The separation of coastal and field artillery was made complete in 1907 with the creation of the Field Artillery Corps and the Coast Artillery Corps and the Coast Artillery School, which was located at Fort Monroe. To meet the increased demands placed on Fort Monroe by the school, an aggressive building program was undertaken beginning in 1906, and lasting through 1912. Buildings from this era represent the vast majority of extant structures from the period 1900-1929.

The buildings dating from this period are coherent stylistically. Almost all are derived from Colonial Revival and Neoclassical Revival styles, albeit often a vernacular rendition. All but three are red brick with white ar pink mortar; trim is usually white masonry (limestone or concrete). Gable and hipped roofs are most common, and many buildings have one or more dormers. Slate roofs are common, as are red brick chimneys and water tables. Jack and segmental arches abound. Some buildings incorporate elements of classical detailing, such as door surrounds, architraves, and cornice trim. Only a handful of interiors are primarily or even partially intact. A notable example is Building 105, the Old PX and Gym, which has its original staircase, pilasters, tin ceiling, and gallery suspended over the gymnasium floor.

There are several areas on post where evidence of planning can be seen. Although some structures were erected wherever a convenient lot was available, others were obviously meant to be seen as a part of a grouping or streetscape. One such planned complex is the Coast Artillery School (Buildings 133, 134, 138, and 161). Another significant vista is formed by architect-designed Buildings 100-103, which probably made that part of Ingalls road a very handsome streetscape in the early twentieth century. In a small residential enclave, a group of houses on Tidball Road and Harrison street were built from the same plans and from a cohesive enclave of buildings. Similar houses line Moat Walk and Patch Road. Several large homes were erected on Fenwick road, east of the Chamberlin Hotel, in 1907 and 1908. The Commanding General's home (Building 119) is clearly the centerpiece of this stately row, with the other built to complement.

After the turn of the century, the function of a building seemed to have little bearing on whether it was located inside or outside the fort, which had long been considered obsolete for protection and/or defense. Outside the fort, the general trend was building toward the southwest. Inside, buildings were erected without any apparent scheme, and probably simply put

wherever there was vacant space.

In order to accommodate the influx of officers on post, many new quarters were erected in 1906 and 1907. A standard set of plans from the Quartermaster General's office were used to construct twenty similar duplexes, seven of which were built in 1906, and the rest in 1909 and 1911. Noteworthy from this period are the three multi-family residences and the bachelor officers' quarters on Ingalls Road (Buildings 100-103) that were designed by nationally-known architect Paul Pelz, formerly of the Smithmeyer and Pelz.

The building program continued in 1908 with the construction of the ordinance storehouse (Building 135), and more quarters. In 1909, several new residences were built in addition to the Coast Artillery School complex. Clustered around Ingalls road, near the Chamberlin Hotel, the Coast Artillery School buildings are similar in style and detailing. The Officer's Classrooms (Building 133), Enlisted Classrooms (Building 134), and Library (Building 138) were all built in 1909. A fourth building, the Enlisted Specialist's Barracks (Building 161) was erected in 1912 and enlarged in 1940.

All of the buildings erected in 1910 and 1911 were residences, with the exception of Building 159 (1911), which was used for the band, and also contained a mess hall and shops.

After 1912, the only buildings to be erected before the United States involvement in World War I were an observation tower (built near the beach in 1915, and now owned by the Naval Surface Weapons Center), a Post Exchange, and heating plant. By 1917, the Coast Artillery School had become a wartime training center, and began to "train officers and enlisted specialists for duty with railway, tractor, antiaircraft, and trench mortar artillery in the field."[15] Wartime had brought great numbers of officer candidates to Fort monroe for training. Temporary camps were erected to meet the new demands. Approximately 250 temporary buildings were completed in a six-month period form June 1918 to January 1919. These hastily-constructed frame buildings were used as quarters, barracks, mess halls, lavatories, classrooms, or storehouses and later were neglected to the point of near-collapse.

From the end of World War I to the 1930s, only a handful of buildings were constructed, and even fewer remain. The extant structures include: quarters (Building 167), a storage building (Building 168), a water tower (Building 13), and the enlisted men's swimming pool (Building 41). Among now-vanished buildings form the 1920s is the Liberty Theatre, which was located near where Building 28, Directorate of Engineering and Housing (old

Submarine Mine Depot) is now. Its replacement, the post theater (Building 42), built in 1938, stands on Tidball Road.

There are a few non-military structures at Fort Monroe dating from this time. The YMCA building was built in 1903 with private funds. The plaque reads: "In loving memory of her father and mother, and as a token of good will, to the men of the United States Army, Helen Miller Gould presented this building and equipment to the International Committee of young Men's Christian Association. December 1903." Additions were made in 1913 and later.

St. Mary Star of the Sea Catholic Church, at Frank Lane and Ingalls Road, was built in 1903 on the site of the earlier church of the same name. This elaborate, masonry building hods the cornerstone from the original wooden church (1860) as well as its own. The church is relatively unaltered since its construction, except for the removal of the spires.

By far the largest building at Fort Monroe today is the Chamberlin Hotel, built in 1928. Its predecessor, the first Chamberlin Hotel, burned too the ground in 1920, and the lot remained vacant for six years. Despite some reservations, the War Department granted a fifty-year least to the Old Point Hotel Corporation in order that the second Chamberlin could be built on the site of the first. Called the Chamberlin-Vanderbilt when it opened in 1928, the hotel remained in private ownership until the Second World War. In 1942, the hotel was purchased by the United States Navy, to help with the housing shortage. Four years later, in 1946, there was talk of the Chamberlin being acquired by the Army; however, the War Department was not interested in ownership of the structure. It was sold, under the terms of the original lease, to Mr. L. U. Noland, a Richmond restaurateur. The lease was renewed in 1966.

E. 1930-1961

The impact of the Great Depression was not immediately felt at Fort Monroe. Not until the Economy Bill of 1933 did the Coast Artillery School have to make appreciable budget cuts. Many student officers and instructors were assigned to the Civilian Conservation Corps in 1933, resulting in the cancellation of summer maneuvers at Fort Story. That years classes were concluded three weeks ahead of schedule.

Construction continued throughout the Great Depression and , due to financial support from the Public works Administration (PWA) of 1933, actually increased. The PWA assisted in improvements at thirty-two army posts.[16] Most of the structures erected were of the Colonial Revival Style. The "Student Apartments" were

erected just prior to PWA involvement at Fort Monroe, from 1930 to 1934, along Ingalls and Fenwick Roads (Buildings 33, 34, 35, 43, 44, 45, 51, 52, and 54). In December 1930, the officers' new Beach Club and golf course were dedicated. The north wing of Randolph Hall, the new bachelors' quarters, was completed and three sets of officers' duplexes (Buildings 186, 187, and 188) were erected in 1931.

Hurricanes in August and September 1933 caused extensive damage to the post and , consequently, prompted more construction. Additional room for construction was obtained by infilling along the Mill Creek shoreline. The area post was thereby increased to 583.55 acres. The hurricanes occurred at a time when the government was undertaking an extensive building program to counteract the Great Depression; therefore, a large number of structures were completed in 1934. Fort Monroe initially received $1,646, 246 of National Industrial Recovery Act (NIRA) funds, of which $1,000,000 was allocated for the construction of a new sea wall. New buildings completed in 1934 included a central garage (Building 57), detailed with Egyptian pylons; NCO duplex quarters (Buildings 25, 26, 30, 31, 191, 192, 193, 194, 195, and 196); the NCO Club (Building 36); the Coast Artillery Board office building (Building 37); ordinance machine shop (Building 57); and various shops and magazines. Also completed in 1934 were the addition to Randolph Hall, the new Beach Club (the one constructed in 1930 was destroyed by the hurricanes), and the bandstand (Building 4).

After this building boom, other improvements occurred at Fort Monroe in the late 1930s. A sewage disposal plant was completed near the end of 1937 and a new theater, financed by the work Projects Administration (WPA) and the Army Motion Picture Service, was opened November 1938. A new Quartermaster Detachment barracks (Building 56) and the Submarine Mine Depot (Building 28) were completed and the Old Main Barracks was extensively renovated in 1939.

World War II brought an increase in activity to Fort Monroe. Camp #3, consisting of classrooms, mess halls, supply buildings, and twelve temporary barracks, was built near Battery Eustis in 1940 to accommodate the influx of trainees to Fort Monroe. The structures of Camp #3 and the camp northeast of the fort make up the majority of the extant temporary structures at the post. That same year, buildings in the old stable area were razed to make way for the Coast Artillery's Enlisted Specialists' School (Building 163). Also constructed were a barracks and mess addition to Building 161. The hospital's rear wing was razed and reconstructed in 1941. In 1943, a military highway, Mercury boulevard, was constructed to improve transportation to the post. Inadequate to the Army's needs was old Route 60, a congested and

circuitous two-lane road which passed through the central business districts of Phoebus and Hampton before continuing to Newport News. The new route was 9.5 miles in length and cost $1.5 million. The railroad trestle was used as the initial fill for a new route into the post. McNair Drive, the new route, bypassed the main post and proceeded directly to the main dock and hotel. Harbor Control Post #2, the post's only example of International style architecture, was constructed on the southwest bastion of Anderson, was destroyed by fire July 15, 1944. It was rebuilt and reopened in May 1945.

Very little construction occurred after the war because the future of Fort Monroe was uncertain. With its new role as a training and command center for the Army came a new demand for housing. The Wherry Housing complex, 53 buildings containing 206 units, was constructed on the site of Batteries Montgomery and Eustis and completed in October 1953.

In 1959 the Officers' Club was moved from the Flagstaff Bastion to the Officers' Beach Club. The Beach Club was completely remodelled. The casemates of the second front were remodeled in 1959 and became the Chapel Center. The old wharf located at the foot of Ingalls Road was finally demolished in 1961, Fort Monroe was certified as a National Historic Landmark. Since that time, construction at Fort Monroe has been dominated by the maintenance of the existing structures.

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2. Lyon G. Tyler, (ed), Narratives of Early Virginia, 1606-1625 (New York: Barnes and Noble, Inc., 1966), pp. 223-224, see Weinert, p. 5.

3. Weinert, pp. 5-6.

4. Weinert, p. 11.

5. Letter, R. Archer to W. Maxwell, March 22, 1847, in Virginia Historical Society, see Weinert p. 14.

6. Collections of the Virginia Historical Society (Richmond, 1882-1892). Vol. IV, p. 342, see Weinert p. 16.

7. Weinert, p. 12.

8. Weinert, p. 13.

9. Weinert, p. 28.

10. Weinert, p.28.

11. Weinert, p. 30.

12. Weinert, p. 85.

13. Dudley Taylor Cornish, The Sable Arm: Negro Troops in the Union Army (New York: W.N. Norton and Company, 1966), p. 17.

14. Ulysses S. Grant, "Preparing for the Campaigns of '64", Battles and Leaders of the Civil War, Vol. IV, edited by Robert Underwood Johnson and Clarence Clough Bull (New York: Thomas Yoseloff, 1956), p. 116.

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